BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 91-112

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SAFETY RULES FOR US/NATO STRIKE FIGHTERS

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This instruction implements AFPD 91-1, Nuclear Weapons and Systems Surety. This publication is consistent with AFPD 13-5, Air Force Nuclear Enterprise. It applies to US F-15E, US/NATO F-16A/B/C/D, and NATO PA-200 aircraft and nuclear weapons dedicated for use with the aircraft. The safety rules may only be changed or supplemented using procedures in AFI 91-102, Nuclear Weapon System Safety Studies, Operational Safety Reviews, and Safety Rules. See Attachment 1 for abbreviations and acronyms used in this instruction. This instruction does not apply to the Air Force Reserve and Air National Guard. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, Management of Records, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication; route AF Form 847s from the field through the appropriate functional's chain of command. Field activities must send implementing publications to the higher headquarters functional OPR for review and coordination before publishing. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, Publications and Forms Management, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items.

SUMMARY OF CHANGES

This document is substantially revised and needs to be completely reviewed. References to the B61-10 were removed (due to being made inactive per Production Control Document dated 1 Oct 2010); clarified actions to be taken for broken cockpit seals; clarified the term "Major Maintenance" for consistency with other publications; and jettison rules were simplified.

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Section A—— Authority and Responsibilities

1. Secretary of Defense Direction.

1.1. The Secretary of Defense has directed the Secretary of the Air Force to develop and implement safety rules for all Air Force nuclear weapon systems.

2. Functional Responsibilities.

- 2.1. The Air Force Chief of Safety:
 - 2.1.1. Ensures safety rules work, providing maximum safety consistent with operational requirements.
 - 2.1.2. Ensures MAJCOMs follow the safety rules.
 - 2.1.3. Is responsible, through the Air Force Safety Center, for interpretation/clarification of general and specific guidance in Section B.

2.2. Major Commands:

- 2.2.1. Ensure their units follow the safety rules.
- 2.2.2. Ensure manuals, checklists, technical orders and other publications do not conflict with the safety rules.
- 2.2.3. Inspect for compliance.

Section B—Safety Rules

3. General Guidance.

- 3.1. Nuclear weapons will not be intentionally exposed to abnormal environments except in an emergency. (T-0).
- 3.2. Nuclear weapons shall not be used for training or for troubleshooting. (i.e., to confirm the existence of a fault, aid in fault isolation, or verify that a fault has been corrected) except as explicitly allowed by a specific safety rule. (T-0).
- 3.3. Nuclear weapons may be used for exercises except when explicitly prohibited by specific safety rules. (T-0).
- 3.4. Personnel having physical access to nuclear weapons must be certified under the PRP in accordance with DoD Instruction 5210.42, *Nuclear Weapons Personnel Reliability Program (PRP)*. (T-0).
- 3.5. Only certified procedures, personnel, equipment, software, facilities, and organizations, authorized by the appropriate level of authority, will be employed to conduct nuclear weapon system operations. (T-0).
- 3.6. The total number of personnel performing nuclear weapon system operations will be held to the minimum consistent with the operations performed. (T-0).
- 3.7. At least two authorized persons must be present during any operation with a nuclear weapon, and certain designated components as defined by the Military Department, except

when authorized by a specific safety rule. They must be able to detect incorrect or unauthorized procedures in the task being performed. They must also know and understand applicable safety and security requirements. (T-0).

- 3.8. Physical security will be maintained in accordance with DoD Directive O-5210.41, *Security Policy for Protecting Nuclear Weapons*. (T-0).
- 3.9. Nuclear weapons will be transported as determined by the Combatant Commander or the custodial Military Department in accordance with DoD Directive 4540.05, *DoD Transportation of U.S. Nuclear Weapons*. Additionally, custody and accountability transfers during logistic movements will be by courier receipt system to ensure positive control. (T-0).
- 3.10. Use control operations will be in accordance with plans and procedures prescribed by the applicable Combatant Command and TPs. (T-0).
- 3.11. Verification that a nuclear warhead is not present in a test assembly must be made using NNAP at the last practical opportunity agreed upon by the DoD and or DoE before the conduct of an operational test. (T-0).
- 3.12. Deviations from safety rules are permitted in an emergency, except as follows: (T-0).
 - 3.12.1. U.S. custody must be maintained until receipt of a valid nuclear control order that permits transferring U.S. nuclear weapons to non-U.S. delivery forces. (T-0).
 - 3.12.2. Nuclear weapons will not be expended unless a valid, properly authenticated nuclear control order conveying release or expenditure authority is received. (T-0).
 - 3.12.3. Jettisoning of nuclear weapons, for applicable systems, is permitted in the event of an emergency, and is to be accomplished according to plans and procedures prescribed for the area of operations. (T-0).

4. Specific Guidance.

- 4.1. These safety rules apply to nuclear capable units that operate the F-15E, F-16A/B/C/D, and/or PA-200 strike aircraft (US/NATO Strike Fighters) and/or possess the nuclear weapons dedicated for use with these aircraft. Rules pertaining to protective aircraft shelters (PAS) containing nuclear weapons-loaded Weapons Storage and Security Systems (WS3) apply regardless of the type aircraft parked in the PAS. (T-0).
- 4.2. The following weapons are authorized:
 - 4.2.1. B61-3
 - 4.2.2. B61-4

5. Temporary Limitations.

5.1. The Air Force may impose restrictions that are more stringent than those contained in safety rules, but may not unilaterally change the safety rules.

6. Modifications.

- 6.1. Changes that potentially impact nuclear weapon system surety must meet requirements identified in AFI 91-102, *Nuclear Weapon System Safety Studies, Operational Safety Reviews, and Safety Rules.* (T-0).
- 6.2. Do NOT modify aircraft monitoring and control (AMAC), stores management system (SMS), suspension and release systems, handling and test equipment, or any aircraft system component, including software and procedures, that affects nuclear surety without US Air Force approval IAW AFI 63-125, *Nuclear Certification Program.* (T-0).

7. Security Criteria.

- 7.1. Allied Command Operations (ACO) Directive 80-6, USEUCOM Instruction 6801.01, Nuclear Surety Management for the Weapons Storage and Security System; DoD Directive 5210.41, Security Policy for Protecting Nuclear Weapons, DoD S-5210.41-M, Nuclear Weapons Security Manual (U), AFMAN 31-108, Air Force Nuclear Weapons Security Manual; and AFI 10-1101, Operations Security (OPSEC) Instructions, apply. Security provided by Non-US military services must meet the criteria in the documents listed above. (T-0).
- 7.2. For US/NATO joint theater operations in Allied Command Operations, SACEUR/CDRUSEUCOM set security requirements for all nuclear weapon operations. They must be at least equal to US Air Force security directives. (T-0).
 - 7.2.1. Individuals performing nuclear weapon operations must:
 - 7.2.2. Possess at least a **SECRET** clearance granted IAW US Air Force or NATO-nation security directives. NATO clearance and investigative requirements must be at least equal to US Air Force requirements. (T-0).
 - 7.2.3. Be specifically authorized to perform such operations. (T-0).

8. Tamper Control and Detection.

- 8.1. AFI 91-104, *Nuclear Surety Tamper Control and Detection Programs*, which defines Two-Person Concept and sealing requirements, applies.
 - 8.1.1. Tamper Control (Two-Person Concept). While weapons are under US custody, all two-person concept teams must have at least one person who is a member of the US Armed Forces. A two-person concept team shall: (T-0).
 - 8.1.2. Verify seal integrity and safe position of switches that are safety wired and sealed. (T-0).
 - 8.1.3. Verify controls and seals before and after any task or operation performed in the cockpit. (T-0).
- 8.2. Tamper Detection (sealing). Authorized user-nation personnel must apply seals to designated prearming and release controls. The seals must: (T-0).
 - 8.2.1. Have a distinctive marking. (T-0).
 - 8.2.2. Provide evidence of tampering or accidental activation. (T-0).

- 8.3. An aircraft with all preload functions complete and ready for weapons mating and loading (i.e. safety wired and sealed) is a critical component and handled IAW AFI 91-105, *Critical Components*. An aircraft safety wired and sealed with training seals is not a critical component. (T-0).
- 8.4. The US load monitor must verify the seals before loading and unloading weapons. (T-0).
- 8.5. A MAJCOM prescribes a course of action when an installed seal is accidentally broken during authorized operations. For seals broken during flight operations, comply with paragraph 8.6.3. (T-0).
- 8.6. If operational seals have been broken or tampered with, as a minimum:
 - 8.6.1. Implement procedures to maintain control of the system until the situation is resolved. (T-0).
 - 8.6.2. The US custodian will conduct an investigation IAW AFI 91-204, *Safety Investigations and Reports*. (T-0).
 - 8.6.3. Verify SAFE status of the weapon using the Aircraft Monitoring and Control (AMAC) system and rack locked prior to resealing the consent switch. (T-0).
- 8.7. The user-nation controls receipt, storage, issue, and disposal of dies (or unique identifying devices) and seals.

9. Personnel Reliability.

9.1. Personnel that have physical access to nuclear weapons must be qualified under a personnel reliability program. DoD Directive 5210.42, *Nuclear Weapon Personnel Reliability Program (PRP)*, and AFMAN 10-3902, *Nuclear Weapons Personnel Reliability Program*, apply to US personnel. Host nations will implement equivalent personnel reliability programs. (T-0).

10. Nuclear Identification.

10.1. Ensure test and training shapes can be distinguished from nuclear weapons. (T-0).

11. Weapons Custody.

11.1. US custodial agents maintain custody of nuclear weapons unless custody is transferred to user nations as a result of an authenticated execution message. Reestablish US custody if weapons are not employed. (T-0).

12. Airspace Restrictions.

- 12.1. In airspace controlled by the base:
- 12.2. Prohibit overflight of weapons movements, nuclear loaded aircraft, and aircraft shelters with nuclear weapons inside and not secured in a locked weapons storage vault. (T-0).
- 12.3. Prohibit direct overflight of prime nuclear airlift force aircraft operations. (T-0).

13. Basic Aircraft Configurations.

13.1. Place aircraft in the following configurations once all preload functions are complete prior to loading nuclear weapons.

- 13.1.1. F-15E:
- 13.1.2. Nuclear consent switches in the SAFE position. (T-0).
- 13.1.3. Nuclear consent switch guards down, safety wired, and sealed. (T-0).
- 13.1.4. Master arm switch in the SAFE position. (T-0).
- 13.1.5. Ensure impulse cartridges are not installed in the wing or centerline pylon breaches when nuclear weapons will be loaded on those stations. (T-0).
- 13.2. F-16A/B/C/D (forward cockpit):
 - 13.2.1. Nuclear consent switch in the OFF position. (T-0).
 - 13.2.2. Nuclear consent switch guard down, safety wired, and sealed. (T-0).
 - 13.2.3. Master arm switch in the OFF position. (T-0).

13.3. PA-200:

- 13.3.1. Control Arm of the Special Weapons Controller (SWC-2) Panel in the OMS (OFF-MONITOR-SAFE) position, safety wired, and sealed. (T-0).
- 13.3.2. Bomb Release Safety Lock/Unlock switch in the LOCK position with switch guard down, safety wired, and sealed. (T-0).
- 13.3.3. Consent/Off switch in OFF position. (T-0).
- 13.3.4. Master arm safety switch (MASS) in the LOCK/SAFE position. (T-0).

14. Storage, Maintenance, Testing, Loading, and Unloading.

- 14.1. Store nuclear weapons in US Air Force-approved, locked, and secured facilities. (T-0).
- 14.2. Use applicable technical data to verify weapon condition prior to handling. (T-0).
- 14.3. Load nuclear weapons only on aircraft certified mission capable for the mission to be performed. (T-0).
- 14.4. Allow only members of US Armed Forces to conduct maintenance on nuclear weapons. (T-0).
- 14.5. Perform nuclear weapon maintenance only in a protective aircraft shelter (PAS). (T-0).
- 14.6. Major nuclear weapons maintenance in a PAS will be performed in a WMT or nuclear-certified replacement (e.g. STMS). (T-0).
 - 14.6.1. Major Maintenance is any operation that breaches the "minimum configuration" as defined in the Safety Precautions section of TO 11N-B61-1, Assembly, Test, Maintenance, and Storage Procedures; B61-3, -4, and -10.
 - 14.6.2. Prior to initiating unlock procedures to raise the weapons storage vault (WSV) or otherwise introducing a nuclear weapon to the PAS for major maintenance, remove all conventional munitions and aircraft from the PAS and comply with appropriate security measures. (T-0).
 - 14.6.3. For operations in a WMT or nuclear certified replacement (e.g., STMS), use the guidelines in applicable tech data. Due to the Faraday shielding provided by the WMT or

its nuclear certified replacement, maintenance operations may be conducted irrespective of lightning occurrence or probability of occurrence. (T-0).

15. Movement of Nuclear Weapons.

15.1. For Prime Nuclear Airlift Force movements, AFI 91-115, Safety Rules for Nuclear Logistics Transport by the Prime Nuclear Airlift Force applies. (T-0).

16. Operations in a PAS with a Weapon Storage Vault.

- 16.1. Maximize the use of the WSV surety features by keeping the nuclear weapon-loaded WSV down and locked unless the specific operation being performed requires vault access.
- 16.2. Simultaneous presence of conventional munitions and nuclear weapons (exposed or with the vault NOT fully down) is prohibited except during nuclear generations, command disablement operations, or CJCS-directed Stockpile Emergency Verifications (SEV). (T-0).
- 16.3. VSimultaneous presence of conventional munitions and nuclear weapons (exposed or with vault NOT fully down) during practice generations, practice alerts, exercises, or evaluations is prohibited. Self-defense munitions loaded on aircraft and one additional load of air-to-air missiles, chaff, and flares, and an aircraft gun loading system, which may contain multiple loads, are permitted. (T-0).
- 16.4. Authorized operations involving both nuclear weapons and conventional munitions in a PAS with WSV (e.g., nuclear generation, command disablement operations, and CJCS-directed SEV) always require MAJCOM-approved plans. The appropriate host/US wing commander must authorize each operation prior to start. Self-defense munitions as described above do not require a plan. (T-0).
- 16.5. Only aircraft NOT loaded with live munitions (except for captive air-to-air missiles, chaff, flares, and aircraft target practice gun ammunition) and associated ground support equipment can remain in the PAS while performing maintenance on the WSV, or authorized weapons maintenance in the WSV, provided all other activities within the PAS are terminated. (T-0).
- 16.6. In a PAS with nuclear weapon-loaded WSV, conventional munitions may NOT exceed 10,000 pounds net explosive weight (NEW). (T-0).
- 16.7. Conventional munitions (except for air-to-air missiles) must be positioned no closer than 15 feet from the WSV (Figure 1). Do NOT position forward firing munitions in storage with the nose or exhaust pointed directly at an opened nuclear weapon-loaded WSV. Air-to-air missiles, chaff, flares, and aircraft gun ammunition loaded in preparation for strike are authorized as long as they are electrically and/or mechanically safed, as directed by technical orders. In addition, hazard class 1.4 training munitions, chaff and flares, loaded and safed, on aircraft may be stored within 15 feet of a closed and locked WSV to accommodate parking two aircraft in a third generation PAS. (T-0).

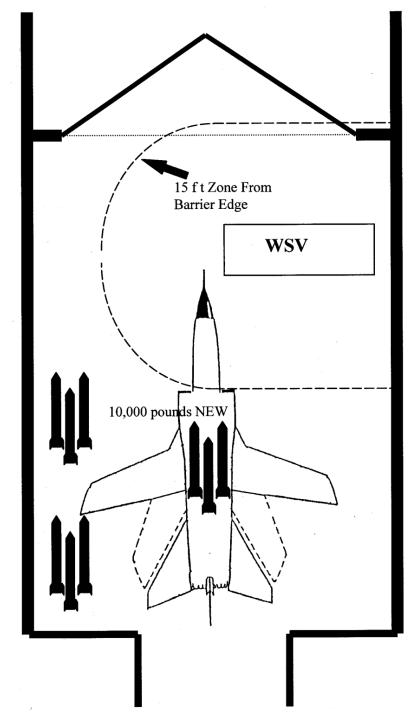


Figure 16.1. Placement of Munitions 15 Feet from WSV.

16.7.1. If the placement of the WSV, the physical dimensions of the PAS, and the size of a single aircraft are such that the single aircraft (for example, PA-200 in 1st generation PAS) cannot have bombs loaded and meet the 15-foot restriction from the WSV, then the following additional restrictions apply when loading conventional bombs in the PAS (Figure 2): (T-0).

15 ft Zone From Barrier Edge **WSV** 5.5 ft 1,780 (445ea)lbs NEW 25 ft Zone From Barrier Edge NEW of Stored 5,500 lbs Peacetime Weapons 8,000 lbs Wartime **Total NEW**

Figure 16.2. Placement of Munitions When 15-Foot Restriction Cannot Be Met.

- 16.7.1.1. Park aircraft as far from the WSV as practical. (T-0).
- 16.7.1.2. No conventional weapon in the PAS (on- or off-aircraft) may exceed 445 pounds NEW each. (T-0).

- 16.7.1.3. Total NEW in the PAS will not exceed 5,500 pounds. (T-0).
 - 16.7.1.3.1. During combat contingency operations, increased hostilities or wartime operations, the host unit commander may authorize an increase in the total NEW, not to exceed 8,000 pounds. (T-0).
- 16.7.1.4. All conventional munitions NOT loaded on the aircraft will be at least 25 feet from the WSV. (T-0).
- 16.7.1.5. Do NOT exceed 445 pounds NEW per aircraft weapon station. (T-0).
- 16.7.1.6. Do NOT exceed four aircraft-loaded bombs within 15 feet of the WSV. No aircraft-loaded bomb may be closer to the WSV than 5.5 feet. (T-0).
- 16.7.2. The preceding restrictions do not limit towing or taxi operations of aircraft loaded with conventional munitions into or out of a PAS containing a WSV.
- 16.8. Do not conduct open fuel cell maintenance operations in a PAS containing a nuclear weapon-loaded WSV. (T-0).
- 16.9. Perform normal day-to-day aircraft maintenance operations only when the WSV is down and locked. (T-0).
- 16.10. Unlock the WSV only after complying with the appropriate security measures. (T-0).
 - 16.10.1. Before raising a nuclear weapon-loaded WSV to perform nuclear generation actions:
 - 16.10.2. Have qualified personnel verify that all conventional munitions are electrically and/or mechanically safed, as directed by technical orders. (T-0).
 - 16.10.3. Fuel the mission-capable aircraft and prepare it for loading, as required. (T-0).
 - 16.10.4. Cease aircraft maintenance operations. (T-0).
- 16.11. When performing CJCS-directed SEV in a PAS where conventional munitions are present, the WSV will be unlocked and opened only long enough to record the required nuclear weapon data. (T-0).
 - 16.11.1. Prior to initiating unlock procedures to raise the WSV:
 - 16.11.1.1. Have qualified personnel verify all conventional munitions in the PAS are electrically and/or mechanically safed, as directed by technical orders. (T-0).
 - 16.11.1.2. Ensure aircraft is properly grounded. (T-0).
 - 16.11.1.3. Ensure the nose or exhaust of forward firing munitions in storage will not point directly at an opened nuclear weapon-loaded WSV. (T-0).
 - 16.11.1.4. Cease all other operations within the PAS. (T-0).
 - 16.11.2. Allow only personnel required to perform the SEV to remain in the PAS. (T-0).
- 16.12. When a nuclear weapon-loaded WSV is NOT down, the following restrictions apply:
 - 16.12.1. Do NOT move aircraft into or out of the PAS. (T-0).
 - 16.12.2. Move only mission essential equipment into or out of the PAS. (T-0).

- 16.12.3. Do NOT perform engine runs, fueling, or liquid oxygen servicing operations. (T-0).
- 16.12.4. Do NOT perform conventional integrated combat turnaround procedures. (T-0).
- 16.12.5. Perform only those operations approved by the applicable US Air Force Commander in accordance with appropriate directives and technical data. (T-0).
- 16.13. If fuel, liquid oxygen, hydrazine, or similar hazardous substance release within the PAS is deemed an emergency and poses a threat to the nuclear weapons, return the nuclear weapon-loaded WSV to a fully down position, if possible, until the emergency is terminated by proper authority. (T-0).
- 16.14. The WSV need NOT be locked when it is placed in the down position between phases of an operation (e.g. maintenance, generation exercises). (T-0).

17. Operations in a PAS without a Weapon Storage Vault.

- 17.1. Simultaneous presence of conventional munitions and nuclear weapons is prohibited except during nuclear generations. (T-0).
- 17.2. Simultaneous presence of conventional munitions and nuclear weapons during practice generations, exercises, or evaluations is prohibited. Self-defense munitions loaded on aircraft and one additional load of air-to-air missiles, chaff, and flares, and an aircraft gun-loading system, which may contain multiple loads, are permitted. (T-0).
- 17.3. Authorized operations involving both nuclear weapons and conventional munitions in a PAS without WSV (i.e., nuclear generation, command disablement operations, or CJCS-directed SEV) always require MAJCOM-approved plans. The appropriate host/US wing commander must authorize each operation prior to start. Self-defense munitions as described above do not require a plan. (T-0).
- 17.4. Before introducing nuclear weapons into a PAS to load onto an aircraft for generation, and after complying with applicable security directives:
 - 17.4.1. Have qualified personnel verify that conventional munitions, if present, are electrically and/or mechanically safed, as directed by technical orders. (T-0).
 - 17.4.2. Fuel the mission-capable aircraft and prepare it for loading, as required. (T-0).
 - 17.4.3. Cease aircraft maintenance operations. (T-0).
 - 17.4.4. Ensure the net explosive weight of conventional munitions inside the PAS is minimized. (T-0).
- 17.5. Remove all conventional munitions and aircraft from the PAS before performing any major maintenance on nuclear weapons inside a PAS. (T-0).

18. Operations outside a PAS.

- 18.1. Limit operations to the exercising or execution of approved operational plans. (T-0).
- 18.2. Simultaneous presence of conventional munitions and nuclear weapons is prohibited. However, self-defense munitions loaded on the aircraft are permitted. Additional stores not loaded on the aircraft are prohibited. (T-0).

- 18.3. The aircraft location must support intermagazine criteria (K-11) from any potential explosive site (PES), for the aircraft to be nuclear loaded. (T-0).
- 18.4. Before conducting nuclear weapons loading operations for generation:
 - 18.4.1. Have qualified personnel verify that self-defense munitions are electrically and/or mechanically safed as directed by technical orders. (T-0).
 - 18.4.2. Fuel the mission-capable aircraft and prepare it for loading, as required. (T-0).
 - 18.4.3. Cease any other aircraft maintenance operations on that aircraft. (T-0).

19. Ground Operations Involving Nuclear Weapon-Loaded Aircraft.

- 19.1. Apply power to a loaded nuclear weapon only for authorized PAL operations or to monitor the weapon. Keep power applications to a minimum. (T-0).
- 19.2. Apply power to a nuclear weapon-loaded aircraft only to: (T-0).
 - 19.2.1. Perform authorized maintenance (T-0).
 - 19.2.2. Perform authorized preflight operations (T-0).
 - 19.2.3. Start the engine or engines (T-0).
 - 19.2.4. Warm up equipment (T-0).
 - 19.2.5. Monitor the radio (T-0).
 - 19.2.6. Perform authorized PAL operations (T-0).
- 19.3. Keep aircraft towing to a minimum. (T-0).
 - 19.3.1. A qualified and authorized individual must be in the cockpit during towing. (T-0).
 - 19.3.2. Have a TPC team verify the basic aircraft configuration following towing operation. (T-0).
- 19.4. Engine Run up.
 - 19.4.1. Allow only authorized aircrews to perform engine run up. (T-0).
 - 19.4.2. Use a physical barrier to prevent an unauthorized takeoff during engine run up. (T-0).
 - 19.4.3. Have a TPC team verify the basic aircraft configuration following engine run up. (T-0).
- 19.5. Run the engine or engines only if necessary to: (T-0).
 - 19.5.1. Check aircraft status (T-0).
 - 19.5.2. Perform maintenance (T-0).
 - 19.5.3. Prepare for authorized flying operations (T-0).
 - 19.5.4. Conduct exercises, evaluations or inspections (except as restricted when conventional munitions other than air-to-air missiles, chaff, flares and aircraft gun

ammunition, are in a PAS with nuclear weapons or when a nuclear weapon-loaded WSV is not fully down). (T-0).

- 19.6. Do not move a nuclear weapon-loaded aircraft under its own power unless: (T-0).
 - 19.6.1. Authorized by an authenticated message (T-0).
 - 19.6.2. Necessary to preserve the safety of the weapon system (T-0).
- 19.7. On nuclear weapon-loaded aircraft, conduct: (T-0).
 - 19.7.1. Engine runs only when necessary to check aircraft status, perform maintenance, or prepare for authorized flying operations. (T-0).
 - 19.7.2. Refueling/top-off operations only when necessary to maintain the aircraft for its mission requirements. Defueling operations are not authorized. (T-0).
 - 19.7.3. All other operations only as approved by the applicable US Air Force Commander in accordance with appropriate directives and technical data. (T-0).

20. Flying Operations Involving Carriage of Nuclear Weapons in a Non-strike Configuration.

- 20.1. Do NOT fly in a non-strike configuration unless authorized by the President or the Secretary of Defense. If authorized: (T-0).
- 20.2. Verify PAL is locked prior to loading the nuclear weapon. (T-0).
- 20.3. Put aircraft in its basic configuration (paragraph 14). (T-0).
- 20.4. Do NOT make mechanical and electrical pullout connections between the weapons and the aircraft. (T-0).
- 20.5. Plan flight routes to avoid populated areas to the maximum extent possible. (T-0).

21. Jettison Procedures.

21.1. If loss of the aircraft is anticipated or weapon jettison becomes necessary, safe the weapon, if time and conditions permit.

22. PAL Procedures.

- 22.1. Use PAL codes and equipment only as directed by appropriate authority. (T-0).
- 22.2. Re-lock (disenable) PAL if a strike mission is aborted or terminated. (T-0).

23. Command Disable (CD) Procedures.

23.1. Use CD codes and equipment only as directed by appropriate authority. When performing a command disablement system (CDS) operation on a weapon in storage, the WSV will be unlocked and opened only long enough to perform the CD operation. (T-0).

KURT F. NEUBAUER, Major General, USAF Chief of Safety

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DoD Directive 3150.02, DoD Nuclear Weapon System Safety Program, 24 Apr 2013

DoD Manual 3150.02, DoD Nuclear Weapons System Safety Program Manual, 31 Jan 2014

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AFI 91-102, Nuclear Weapon System Safety Studies, Operational Safety Reviews, and Safety Rules, 25 Feb 2014

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Adopted Forms

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Abbreviations and Acronyms

AFSEC—Air Force Safety Center

ACO—Allied Command Operation

AMAC—Aircraft Monitoring and Control

APU—Auxiliary Power Unit

CD—Command Disable

CJCS—Chairman Joint Chiefs of Staff

DoD—Department of Defense

DOE—Department of Energy

JCS—Joint Chiefs of Staff

MAJCOM—Major Command

MUNSS—Munitions Support Squadron

NATO—North Atlantic Treaty Organization

NEW—Net Explosive Weight

NNAP—Non-Nuclear Assurance Program

OMS—Off-Monitor-Safe

PAL—Permissive Action Link

PAS—Protective Aircraft Shelter

PRP—Personnel Reliability Program

SACEUR—Supreme Allied Command, Europe

SEV—Stockpile Emergency Verification

SHAPE—Supreme Headquarters Allied Powers Europe

SMS—Stores Management System

STMS—Secure Transportable Maintenance System

SWC—Special Weapons Controller

TPC—Two Person Concept

USAFE—United States Air Forces Europe

USEUCOM—United States European Command

WMT—Weapons Maintenance Truck

WSV—Weapons Storage Vault

WS3—Weapons Storage and Security System